

# Author Index to Volume 47

- Alexander, N., Amos, K., and Berge, L.—  
Mott-Schwinger effect in the elastic  
scattering of neutrons from  
<sup>209</sup>Bi 681
- Amos, K.—  
See Alexander, N. 681
- Anis, M. K.—  
See Haque, N. U. 487
- Babuyaima Singh, M.—  
See Ranjit Singh, N. 265
- Back, P. J., Bleaney, B., Bowden, G. J.,  
and Stone, N. J.—  
A nuclear orientation study of terbium  
ethyl sulphate 475
- Berge, L.—  
See Alexander, N. 681
- Bicknell, G. V.—  
Extragalactic radio sources and the role  
of relativistic jets 669
- Bleaney, N.—  
See Back, P. J. 475
- Bowden, G. J.—  
See Back, P. J. 475
- Brunger, M. J.—  
See Samardzic, O. 703
- Chakrabarti, K.—  
See Das, J. N. 751
- Chakraborty, S.—  
See Paul, S. N. 59
- Chatterjee, T. N.—  
See Das, T. K. 817
- Das, J. N.—  
Partial wave expansion of three-particle  
continuum states in hyperspherical  
coordinates: Application to ionisation  
problems 743  
See Seal, S. 49
- Das, J. N., Dey, A., and Chakrabarti, K.—  
Schwinger variational calculation for  
ionisation of hydrogen atoms by  
electrons 751
- Das, T. K., Chatterjee, T. N., and  
Sen, A. K.—  
Solar flare surges in relation to active  
prominences and sunspots 817
- Dawe, R. L., and Hines, K. C.—  
The physics of tachyons. III.  
Tachyon electromagnetism 431
- Deb, N. C.—  
See Ranjit Singh, N. 265
- Delbourgo, R., and Waites, A. B.—  
Induced parity violation in odd  
dimensions 465
- Deshmukh, P. C.—  
See Padma, R. 271
- Dey, A.—  
See Das, J. N. 751
- Dinn, M. J.—  
Parkes and NASA 501
- Duff, K. J.—  
Envelope function theory for direct-gap  
semiconductor superlattices of  
arbitrary grading profile 77
- Ekers, R. D.—  
John Bolton's variable-baseline  
interferometer and the structure of  
radio galaxies 569
- Elford, M. T., Sasaki, S., and Ness, K. F.—  
Drift velocity and  $D_T/\mu$  ratio for  
electrons in a 0.5% hydrogen-xenon  
mixture at 295 K 253
- Fisher, P.—  
See Lewis, R. A. 329
- Gascoigne, S. C. B.—  
John Bolton and the Anglo-Australian  
Telescope 504
- Goddard, D. E.—  
Introduction to John Bolton issue 495
- Green, H. S.—  
A cyclic symmetry principle in  
physics 25  
Statistical symmetries in physics 109
- Greenstein, J. L.—  
The early years of radio astronomy at  
Caltech 555
- Haque, N. U., Hashmi, R. A., and  
Anis, M. K.—  
Influence of metal-glass contact on the  
dynamic response of 0.40 Ag<sub>2</sub>O:0.60  
P<sub>2</sub>O<sub>5</sub> 487
- Harris, D. E.—  
Cygnus A—John Bolton's first cosmic  
source 615
- Hashmi, R. A.—  
See Haque, N. U. 487
- Haynes, R. F.—  
See Goddard, D. E. 495
- Hines, K. C.—  
See Dawe, R. L. 431

- Ho, V. B., and Morgan, M. J.—  
An experiment to test the  
Aharonov-Bohm effect 245
- Hollenberg, L. C., and Tomlinson, M. J.—  
Staggered magnetism in the Heisenberg  
antiferromagnet 137
- Hunstead, R. W.—  
Accurate optical positions for radio  
source identifications 657
- Hurn, J.-A.—  
See Samardzic, O. 703
- Jameson, I., Rawlinson, A. A., and  
Thomas, A. W.—  
The sigma term: Leading non-analytic  
behaviour of decuplet  
contributions 45
- Kannan, R.—  
See Mohan, S. 103
- Kansal, M. K., and Trikha, S. K.—  
The three phases of solid deuterated  
methane 97
- Kellermann, K. I.—  
Compact radio sources, quasars and  
active galactic nuclei 599
- Konovalov, D. A., and McCarthy, I. E.—  
Calculation of electron impact ionisation  
of atomic hydrogen with the exact  
final-state boundary conditions 123
- Lewis, R. A., Fisher, P., and  
McLean, N. A.—  
Spectroscopic and piezospectroscopic  
studies of the energy states of boron in  
silicon 329
- McCarthy, I. E.—  
See Konovalov, D. A. 123
- MacGillivray, W. R., and  
Standage, M. C.—  
Studies involving the resonant interaction  
of laser light with atoms 1
- McLean, N. A.—  
See Lewis, R. A. 329
- Makabe, T.—  
See Robson, R. E. 305
- Manchester, R. N.—  
How I got a job in astronomy 499
- Mazumdar, P. S.—  
See Ranjit Singh, N. 265
- Melrose, D. B.—  
See Wheatland, M. S. 361
- Milne, D. K.—  
John Bolton and the rainmakers 549
- Mitroy, J., and Ratnavelu, K.—  
Close coupling theory of positron  
scattering from alkali atoms 721
- Mohan, S., and Kannan, R.—  
Lattice dynamics of the high  $T_c$   
superconductor  $\text{ErBa}_2\text{Cu}_3\text{O}_7$  103
- Morgan, M. J.—  
See Ho, V. B. 245
- Mukherjee, J., and Roy Chowdhury, A.—  
Solitary magnetosonic waves in a  
relativistic plasma 757  
Self-focussing of nonlinear waves in a  
relativistic plasma with positive and  
negative ions 773
- Ness, K. F.—  
See Elford, M. T. 253
- Orchiston, W.—  
John Bolton, discrete sources, and the  
New Zealand field-trip of 1948 541
- Padma, R., and Deshmukh, P. C.—  
Near-threshold behaviour of generalised  
oscillator strengths for 2p  
ionisation 271
- Paul, S. N., Chakraborty, S., and  
Roy Chowdhury, A.—  
Effect of streaming electrons on the  
propagation of electromagnetic waves  
in a magnetised relativistic  
plasma 59  
See Roy Chowdhury, K. 785
- Petržilka, V.—  
Variations of helicon wave-induced radial  
plasma transport in different  
experimental conditions 315
- Popel, S. I.—  
See Vladimirov, S. V. 375
- Price, M.—  
John Bolton—On doing and being 498
- Ranjit Singh, N., Deb, N. C., Subodh  
Chandra Singh, Th., Babuyaima  
Singh, M., and Mazumdar, P. S.—  
Positronium formation cross sections for  
scattering of positrons from potassium  
and rubidium 265
- Ratnavelu, K.—  
See Mitroy, J. 721
- Rawlinson, A. A.—  
See Jameson, I. 45
- Roberts, J. A.—  
Some memories of John Bolton from  
Caltech and early years at  
Parkes 561

- Robson, R. E.—  
Approximate formulas for ion and electron transport coefficients in crossed electric and magnetic fields 279
- Robson, R. E., and Makabe, T.—  
Transport coefficients and velocity distribution function of an ion swarm in an a.c. electric field obtained from the BGK kinetic equation 305
- Roy, A. L.—  
See Slee, O. B. 145
- Roy Chowdhury, A.—  
See Mukherjee, J. 757, 773  
Paul, S. N. 59  
Roy Chowdhury, K. 785
- Roy Chowdhury, K., Paul, S. N., and Roy Chowdhury, A.—  
Effect of electron inertia on double layers in a relativistic hot plasma 785
- Samardzic, O., Hurn, J.-A., Weigold, E., and Brunger, M. J.—  
Electron impact excitation-autoionisation of the  $(2s^2)^1S$ ,  $(2p^2)^1D$  and  $(2s2p)^1P$  autoionising states of helium 703
- Sarma, S. B. S. S.—  
Estimation of magnetic field strength from enhanced solar radio emission 811
- Sasaki, S.—  
See Elford, M. T. 253
- Saunders, G. A.—  
See Senin, H. B. 795
- Savage, A.—  
Wild, Woolley and Savage—or how John Bolton and I went hunting for quasars and QSOs 589  
See Slee, O. B. 145
- Seal, S., and Das, J. N.—  
Multiple scattering calculation for ionisation of helium atoms by electrons at intermediate energies 49
- Sen, A. K.—  
See Das, T. K. 817
- Senin, H. B., Sidek, H. A., and Saunders, G. A.—  
Elastic behaviour of terbium metaphosphate glasses under high pressures 795
- Sidek, H. A.—  
See Senin, H. B. 795
- Slee, O. B.—  
Some memories of the Dover Heights field station, 1946–1954 517
- Slee, O. B., Roy, A. L., and Savage, A.—  
VLA survey of rich clusters of galaxies. II. The stronger sources: Maps, polarisations and identifications 145
- Standage, M. C.—  
See MacGillivray, W. R. 1
- Stanley, G. J.—  
Recollections of John G. Bolton at Dover Heights and Caltech 507
- Stewart, A. M.—  
Inequalities for isothermal linear response 129
- Stone, N. J.—  
See Back, P. J. 475
- Subodh Chandra Singh, Th.—  
See Ranjit Singh, N. 265
- Thomas, A. W.—  
See Jameson, I. 45
- Tingay, S. J.—  
Centaurus A, the core of the problem 619
- Tomlinson, M. J.—  
See Hollenberg, L. C. 137
- Tripathi, S. K.—  
See Kansal, M. K. 97
- Vladimirov, S. V., and Popel, S. I.—  
Modulational interactions of two monochromatic waves and packets of random waves 375
- Waites, A. B.—  
See Delbourgo, R. 465
- Wall, J. V.—  
Populations of extragalactic radio sources 625
- Weigold, E.—  
See Samardzic, O. 703
- Westfold, K. C.—  
John Bolton—some early memories 535
- Wheatland, M. S., and Melrose, D. B.—  
Cross-field current closure below the solar photosphere 361
- Whiteoak, J. B.—  
John Bolton as a pioneer of OH spectroscopy 577
- Wild, J. P.—  
Eulogy 496  
Some reminiscences of John Bolton 497
- Wright, A. E.—  
From the Parkes Catalogue to COMRAD 585